



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,627	08/19/2003	Rolf Stefani	113391	3795
25944	7590	06/13/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			KHAN, SUHAIL	
		ART UNIT		PAPER NUMBER
		2686		

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/642,627	STEFANI ET AL.
	Examiner	Art Unit
	Suhail Khan	2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/19/2003, 3/12/04
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-28 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2003/0003872 to Brinkley et al, in view of International Patent Pub. No. WO 01/03437 to Albanesi et al.

Referring to claim 1, Brinkley et al disclose a communication system for communicating messages between an aircraft and an operations center (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus), comprising: a portable control and display unit (page 3, paragraph 29, multifunction control display unit; page 3, paragraph 30, portable data communication apparatus); an Aircraft Communication and Reporting System (ACARS) (page 3, paragraph 29, ACARS) transceiver located on the aircraft (page 3, paragraph 29, ACARS) to send and receive (1) a data link message communication by the control and display unit (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus); (2) a voice communication by the control and display unit (page 5, paragraph 56, connection provision is shown through the use of cell phones; it is inherent that cell phones are voice communication devices); the portable control and display unit utilizes the ACARS transceiver to send and receive at least one of the aforementioned communications (page 3,

paragraph 30, portable data communication apparatus onboard; page 3, paragraph 29, ACARS). Brinkley et al do not disclose a peripheral device located on the aircraft, wherein (3) a video communication by the control and display unit.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show a communication system for communicating messages between an aircraft and an operations center, comprising: a portable control and display unit; an Aircraft Communication and Reporting System (ACARS) transceiver located on the aircraft to send and receive (1) a data link message communication by the control and display unit; (2) a voice communication by the control and display unit; and (3) a video communication by the control and display unit; and a peripheral device located on the aircraft, wherein the portable control and display unit utilizes the ACARS transceiver to send and receive at least one of the aforementioned communications, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 2, Brinkley et al disclose the communication system according to claim 1, wherein the control and display unit transmits data messages (page 3, paragraph 29, multifunction control display unit; page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus).

Referring to claim 3, Brinkley et al disclose the communication system according to claim 2, wherein the data messages can be transmitted while in flight (page 2, paragraph 17,

wirelessly communicating the data from the aircraft data services link to the data communication apparatus; page 3, paragraph 29, flight performance data).

Referring to claim 4, Brinkley et al disclose the communication system according to claim 1, wherein the control and display unit transmits a voice communication (page 3, paragraph 29, multifunction control display unit; page 5, paragraph 56, connection provision is shown through the use of cell phones; it is inherent that cell phones are voice communication devices).

Referring to claim 5, Brinkley et al disclose the communication system according to claim 4, wherein the voice communication can be transmitted while in flight (page 5, paragraph 56, connection provision is shown through the use of cell phones; it is inherent that cell phones are voice communication devices that can be used while in flight).

Referring to claim 6, Brinkley et al disclose the communication system according to claim 1 (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus). Brinkley et al do not disclose that the control and display unit transmits a real-time video and single frames.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20) and also show use of video for normal, abnormal and emergency operations (page 14, lines 2-10; it is inherent that these operations require real-time video; also, it is inherent that digital format video entails single frame transmission).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system, wherein the control and

display unit transmits a real-time video and single frames, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 7, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 6 and also show data messages transmitted while in flight (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus; page 3, paragraph 29, flight performance data). Brinkley et al do not disclose real-time video and single frames being transmitted while in flight.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20) and also show use of video for normal, abnormal and emergency operations (page 14, lines 2-10; it is inherent that these operations require real-time video; also, it is inherent that digital format video entails single frame transmission).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system, wherein the real-time video and single frames can be transmitted while in flight, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 8, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 6 and end-to-end communication connectivity

media including digital broadband (page 5, paragraph 56, digital broadband). Brinkley et al do not disclose real-time video as streaming video and single frames.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20); multiplexing various video signals for digital recording (page 3, lines 5-10) and also show use of video for normal, abnormal and emergency operations (page 14, lines 2-10; it is inherent that these operations require real-time video; also, it is inherent that digital format video entails single frame transmission).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system, wherein the real-time video is streaming video and single frames, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 9, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1, wherein the control and display unit (page 3, paragraph 29, multifunction control display unit) functions as a cell phone (page 5, paragraph 56, connection provision is shown through the use of cell phones).

Referring to claim 10, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1, further comprising a SATCOM antenna (page 3, paragraph 28, SATCOM).

Referring to claim 11, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 10, wherein the ACARS transceiver (page 3, paragraph 29, ACARS) switches to the SATCOM antenna when a VHF radio is not communicating (page 3, paragraph 28, SATCOM).

Referring to claim 12, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1, wherein the ACARS transceiver (page 3, paragraph 29, ACARS) transmits and receives a signal over an existing data network (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus).

Referring to claim 13, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1, with a control and display device (page 3, paragraph 29, multifunction control display unit). Brinkley et al do not disclose that the control and display device controls at least one of the movement and the functions of the peripheral device.

However, Albanesi et al show the controller in the cockpit having several preset positions to which the cameras can be automatically commanded (page 4, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system wherein the control and display device controls at least one of the movement and the functions of the peripheral device,

as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 14, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 13. Brinkley et al do not disclose that the peripheral device is a camera.

However, Albanesi et al show onboard cameras (page 5, lines 9-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system, wherein the peripheral device is a camera, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 15, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 14 and a control and display unit (page 3, paragraph 29, multifunction control display unit). Brinkley et al do not disclose that the control and display unit controls the camera movement.

However, Albanesi et al show the controller in the cockpit having several preset positions to which the cameras can be automatically commanded (page 4, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system, wherein the control and display unit controls the camera movement, as taught by Albanesi et al, the motivation being

observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 16, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 13. Brinkley et al do not disclose that the peripheral device is located in a cockpit of the aircraft.

However, Albanesi et al show onboard cameras (page 5, lines 9-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system wherein the peripheral device is located in a cockpit of the aircraft, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 17, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 13. Brinkley et al do not disclose that the peripheral device is located in a cabin of the aircraft.

However, Albanesi et al show onboard cameras (page 5, lines 9-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system wherein the peripheral device is located in a cabin of the aircraft, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 18, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1. Brinkley et al do not disclose a panic button located in or on the aircraft.

However, Albanesi et al show an emergency scenario (page 14, lines 6-10, emergency operations).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the communication system further comprising a panic button located in or on the aircraft, as taught by Albanesi et al, the motivation being enhancing flight crew's situational awareness (page 14, lines 6-10).

Referring to claim 19, Brinkley et al disclose the communication system (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) according to claim 1, wherein the messages are encrypted (page 7, paragraph 70, Smart Access Recorder).

Referring to claim 20, Brinkley et al disclose a method for communicating messages with a control and display unit (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus) in an airborne aircraft (page 3, paragraph 29, multifunction control display unit; page 3, paragraph 30, portable data communication apparatus), comprising: sending and receiving a data link message by the control and display unit (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus); sending and receiving a voice communication by the control and display unit (page 5, paragraph 56, connection provision is

shown through the use of cell phones; it is inherent that cell phones are voice communication devices). Brinkley et al do not disclose controlling a peripheral device within the aircraft using a portable control and display device; and, sending and receiving a video communication by the control and display unit; and obtaining the video communication from a peripheral device located in or on the plane controlled by the control and display unit.

However, Albanesi et al show onboard cameras (page 5, lines 9-10) and the controller in the cockpit having several preset positions to which the cameras can be automatically commanded (page 4, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show communicating messages with a control and display unit in an airborne aircraft and controlling a peripheral device within the aircraft using a portable control and display device, comprising: sending and receiving a data link message by the control and display unit; sending and receiving a voice communication by the control and display unit; sending and receiving a video communication by the control and display unit; and obtaining the video communication from a peripheral device located in or on the plane controlled by the control and display unit, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 21, Brinkley et al disclose the method according to claim 20, wherein the control and display unit (page 3, paragraph 29, multifunction control display unit) sends and receives the messages to an operations center and receives messages from the operations center (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus).

Referring to claim 22, Brinkley et al disclose the method according to claim 20, wherein the control and display unit (page 3, paragraph 29, multifunction control display unit) sends and receives the messages to and from another control and display unit in the aircraft (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus).

Referring to claim 23, Brinkley et al disclose the method according to claim 20, wherein the control and display unit (page 3, paragraph 29, multifunction control display unit) sends and receives positional information concerning the location of the aircraft while airborne (figure 1, 24 - GPWS).

Referring to claim 24, Brinkley et al disclose the method according to claim 23, wherein the positional information further comprises data regarding other aircrafts in the vicinity (figure 1, 24 - GPWS).

Referring to claim 25, Brinkley et al disclose the method according to claim 20, wherein the control and display unit sends and receives a sensor condition input from a physical contact (figure 1, 24 – GPWS).

Referring to claim 26, Brinkley et al disclose the method according to claim 25 (figure 1, 24 – GPWS). Brinkley et al do not disclose that the physical contact further comprises at least one of a panic button, tire detection and door contacts.

However, Albanesi et al show an emergency scenario (page 14, lines 6-10, emergency operations).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show that the physical contact further comprises at least one

of a panic button, tire detection and door contacts, as taught by Albanesi et al, the motivation being enhancing flight crew's situational awareness (page 14, lines 6-10).

Referring to claim 27, Brinkley et al disclose the method according to claim 20 (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus). Brinkley et al do not disclose that the video communication further comprises displaying a streaming video.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show that the video communication further comprising displaying a streaming video, as taught by Albanesi et al, the motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Referring to claim 28, Brinkley et al disclose the method according to claim 20 (page 2, paragraph 17, wirelessly communicating the data from the aircraft data services link to the data communication apparatus). Brinkley et al do not disclose a video communication that further comprises selecting a video frame to be transmitted to an operations center.

However, Albanesi et al show wireless transmission of video data from on-board video sensors to receivers located in the cockpit or at other remote locations (page 4, lines 17-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brinkley et al to show the video communication further comprising selecting a video frame to be transmitted to an operations center, as taught by Albanesi et al, the

motivation being observing those parts of the aircraft that cannot be seen from the cockpit (Albanesi et al, Abstract).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to further show the state of the art with respect to an Aircraft Messaging System.

U.S. Pat. App. Pub. No. 2003/0109973 to Hensey et al

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suhail Khan whose telephone number is (571) 272-7910. The examiner can normally be reached on M-F from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (571) 272-7905.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
sk

Marsha D. Banks-Harold

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600